ABSTRACT OF THE DISCLOSURE

An electroplating solution includes a non-aqueous non-aromatic organic solvent and a mixture including soluble metallic salts and organic additives dissolved in the non-aqueous non-aromatic organic solvent. Electrodeposition of a metal from the electroplating solution includes preparing an electroplating solution and electrodepositing the metal from the electroplating solution onto a conductive substrate under a cathodic current. An electroplating system has a plating chamber containing an electroplating solution, an entry point to the electroplating system, and a transporting system to convey a part to be electroplated from the entry point to the plating chamber. The electroplating solution includes a non-aqueous non-aromatic organic solvent and a mixture including soluble metallic salts and organic additives, the mixture dissolved in the non-aqueous non-aromatic organic solvent.